

Safety Alert...



A Van Explodes



What Happened

A fitter left an E size Oxygen and Acetylene cylinder on the back seat of a Toyota dual cab over the weekend.

On Monday morning the fitter approached the van and opened the door, a large explosion took place. The Acetylene cylinder may not have been fully closed resulting in a small leak and Acetylene accumulated in the van over the weekend. It is believed the ignition could have been caused by either the internal light, the automatic door control or by a mobile phone which was on the front seat of the van. The fitter was also a smoker. The fitter suffered injury to his ear drums and facial. The Toyota dual cabinet was completely destroyed.



Why did the accident happen?

- There was a gas leak from the acetylene cylinder, acetylene gas is combustible.
- The escaped gas was contained within the cabinet.
- The Opening of the van cabinet door exposed the accumulated Acetylene gas to either internal or external sources of ignition thus causing an explosion.

Recommendations:



- Cylinders should ideally be stored in the **open**, protected from sun and rain, and be raised off the ground.
- Cylinders **MUST** be chained, and in **upright** position, if they are full or partially filled. Do not store flammable gas cylinders in enclosed spaces!
- Keep cylinders away from electrical welding tools and sources of heat or sparks.
- Do not use magnets or chain slings for lifting. A purpose-built basket, skid or container, subjected to lifting equipment certification and inspection requirements, shall be used

What else you should know?

- Combustible gas cylinders are screwed left-hand (anti-clockwise to close) and non-combustible gas cylinders are screwed right-hand (clockwise to close)
- Never open a valve more than three revolutions. One full turn is usually enough.